Patent Claims

We Claim:

1. A compound of formula (I):

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or a pharmaceutically acceptable salt thereof,

wherein

R¹ denotes 3-hydroxypropyl, 1,3-dihydroxyprop-2-yl or C₃-C₆-cycloalkylmethyl,

 $R^2 \qquad \qquad \text{denotes hydrogen, C_1-C_6-alkyl, ω-hydroxy-C_2-C_4-alkyl, $1,3$-dihydroxyprop-2-yl or }$

C₃-C₆-cycloalkylmethyl,

Ar denotes unsubstituted phenyl or phenyl which is 1- to 5-substituted by

halogen, hydroxy, C₁-C₄-alkyl, C₁-C₄-alkoxy, C₁-C₄-fluoroalkyl, C₁-C₄-

fluoroalkoxy or -OCH2O-;

R³ denotes phenyl-C₁-C₄-alkyl, wherein the phenyl group may be substituted by

1 to 3 substituents, wherein the substituents independently of one another are

selected from halogen, hydroxy, C_1 - C_4 -alkyl, C_1 - C_4 -alkoxy,

C₁-C₄-fluoroalkyl, and C₁-C₄-fluoroalkoxy;

and

 R^4

denotes hydrogen, C₁-C₄-alkyl, C₃-C₈-cycloalkyl, CH₂COOH, -CH₂C(O)NH₂,

-OH or phenyl- C_1 - C_4 -alkyl.

2. A compound according to claim 1, wherein R^4 is C_1 - C_4 -alkyl.

3. A compound according to claim 1, wherein Ar is unsubstituted phenyl or 2,3-

25 methylenedioxyphenyl.

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- 4. A compound according to claim 2, wherein Ar is unsubstituted phenyl or 2,3-methylenedioxyphenyl.
- 5. A compound according to claim 1, wherein R³ denotes 2-phenylethyl, where the phenyl group may be substituted by 1 to 3 substituents, wherein the substituents independently of one another are each selected from among halogen, hydroxy, methyl, methoxy, trifluoromethyl or trifluoromethoxy.
- 6. A compound according to claim 2, wherein R³ denotes 2-phenylethyl, where the phenyl group may be substituted by 1 to 3 substituents, wherein the substituents independently of one another are each selected from among halogen, hydroxy, methyl, methoxy, trifluoromethyl or trifluoromethoxy.
- 7. A compound according to claim 3, wherein R³ denotes 2-phenylethyl, where the phenyl group may be substituted by 1 to 3 substituents, wherein the substituents independently of one another are each selected from among halogen, hydroxy, methyl, methoxy, trifluoromethyl or trifluoromethoxy.
- 8. A compound according to claim 4, wherein R³ denotes 2-phenylethyl, where the phenyl group may be substituted by 1 to 3 substituents, wherein the substituents independently of one another are each selected from among halogen, hydroxy, methyl, methoxy, trifluoromethyl or trifluoromethoxy.
 - 9. A compound according to claim 1, wherein R³ is 2-(3,5-bistrifluoromethylphenyl)-ethyl.
 - 10. A compound according to claim 2, wherein R³ is 2-(3,5-bistrifluoromethylphenyl)-ethyl.
- 30 11. A compound according to claim 3, wherein R³ is 2-(3,5-bistrifluoromethylphenyl)-ethyl.

- 12. A compound according to claim 4, wherein R³ is 2-(3,5-bistrifluoromethylphenyl)-ethyl.
- 5 13. A compound according to claim 1, wherein the group $-NR^3R^4$ is

$$CF_3$$
 CF_3
 CF_3

10 14. A compound according to claim 2, wherein the group -NR³R⁴ is

15. A compound according to claim 3, wherein the group -NR³R⁴ is

16. A compound according to claim 4, wherein the group -NR³R⁴ is

- 5 17. A compound according to claim 1, wherein
 - R¹ denotes a cyclopropymethyl group, and

 R^2 denotes a hydrogen atom, a C_1 - C_3 -alkyl group or a 3-hydroxypropyl group.

- 10 18. A compound according to claim 2, wherein
 - R¹ denotes a cyclopropymethyl group, and

 R^2 denotes a hydrogen atom, a C_1 - C_3 -alkyl group or a 3-hydroxypropyl group.

- 15 19. A compound according to claim 3, wherein
 - R¹ denotes a cyclopropymethyl group, and
 - R² denotes a hydrogen atom, a C₁-C₃-alkyl group or a 3-hydroxypropyl group.
- 20 20. A compound according to claim 4, wherein
 - R1 denotes a cyclopropymethyl group, and
 - R^2 denotes a hydrogen atom, a C_1 - C_3 -alkyl group or a 3-hydroxypropyl group.
 - 21. A compound according to claim 1, wherein
- 25 R¹ denotes a 3-hydroxypropyl or 1,3-dihydroxyprop-2-yl group, and
 - R^2 denotes a hydrogen atom, a C_1 - C_3 -alkyl group or a 2-hydroxyethyl group.

22. A compound according to claim 2, wherein

 R^1 denotes a 3-hydroxypropyl or 1,3-dihydroxyprop-2-yl group, and

 R^2 denotes a hydrogen atom, a $C_1\text{-}C_3\text{-alkyl}$ group or a 2-hydroxyethyl group.

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23. A compound according to claim 3, wherein

R¹ denotes a 3-hydroxypropyl or 1,3-dihydroxyprop-2-yl group, and

 R^2 denotes a hydrogen atom, a C_1 - C_3 -alkyl group or a 2-hydroxyethyl group.

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24. A compound according to claim 4, wherein

R¹ denotes a 3-hydroxypropyl or 1,3-dihydroxyprop-2-yl group, and

R² denotes a hydrogen atom, a C₁-C₃-alkyl group or a 2-hydroxyethyl group.

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25. A compound according to claim 1, selected from the following compounds:

$$\bigcap_{H_3C} \bigcap_{N} \bigcap_{CH_3} \bigcap_{CF_3}$$

and

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5 26. A process for preparing a compound of formula I according to claim 1, said process comprising reacting an amide of formula II

$$X \xrightarrow{H} Ar$$
 R^3 (II)

wherein Ar, R^3 and R^4 are as defined in claim 1 and X denotes a suitable leaving group,

with a piperidine of formula III

$$\begin{array}{c}
R^{1} \\
N-H \\
R^{2}
\end{array}$$
(III)

wherein R¹ and R² are as defined in claim 1, in an inert solvent in the presence of a base.

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27. A pharmaceutical composition comprising a compound according to claim 1 and one or more pharmaceutically acceptable carriers and excipients.

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28. A method of treating a neurokinin-mediated illness comprising administering to a host in need of such treatment a therapeutically effective amount of a compound according to claim 1.

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- A method according to claim 28, wherein the illness treated is selected from inflammatory and allergic conditions of the airways, eyes, skin, the gastro-intestinal tract, joints, bones and bladder; and central nervous system diseases.
- 30. A method according to claim 28, wherein the illness treated is selected from the following: 20

asthma, chronic bronchitis, hyperreactive airways, emphysema, rhinitis, COPD, pulmonary hypertension, cystic fibrosis, coughs; conjunctivitis, iritis;

dermatitis in contact eczema, neurodermatitis, pruritus, urticaria, psoriasis, sunburn, burns, insect bites, rosacea, itching, sensitive or hypersensitive skin;

gastric and duodenal ulcers, ulcerative colitis, Crohn's disease, inflammatory bowel disease, irritable colon, Hirschsprung's disease, motility problems; rheumatoid arthritis, reactive arthritis, arthrosis, osteoporosis and Reiter's syndrome; 10

irritable bladder, incontinence, urinary urgency, urethritis, colic and cystitis; restless leg syndrome;

dementia, Alzheimer's disease, schizophrenia, psychoses, anxiety states, alcohol or drug dependency, sexual dysfunctions, eating disorders, depression, headaches, epilepsy,

5 Parkinson's disease, stroke;

Herpes zoster, postherpetic pain, tumors, collagenoses, a dysfunction of the deferent urinary tracts, haemorrhoids, nausea and vomiting, and pain.

31. A method according to claim 29, wherein the illness is selected from: COPD, anxiety states and depression.